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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,297	01/30/2004	Richard Allen Hayes	AD6990 US NA	6315
23906 7590 10/05/2007 E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1128 4417 LANCASTER PIKE WILMINGTON, DE 19805			EXAMINER SANDERS, KRIELLION ANTIONETTE	
			ART UNIT 1714	PAPER NUMBER
			NOTIFICATION DATE 10/05/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-Legal.PRC@usa.dupont.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/768,297	<b>Applicant(s)</b> HAYES, RICHARD ALLEN	
	<b>Examiner</b> Kriellion A. Sanders	<b>Art Unit</b> 1714	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 September 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5-91 and 93 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5-14, 16, 20, 38-42, 44, 47, 49, 52-62, 64-73, 75, 76, 78-91 and 93 is/are rejected.
- 7) ☒ Claim(s) 24, 25, 29-32, 43, 45, 46, 48, 50, 51, 63, 74 and 77 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### DETAILED ACTION

1. The finality of the rejection of the last Office action is withdrawn.
2. The indicated allowability of the previously presented claims is withdrawn in view of the newly discovered reference(s) to Peiffer et al. Rejections based on the newly cited reference(s) follow.
3. Applicant's arguments with respect to claims 1-3, 5-91 and 93 have been considered but are moot in view of the new ground(s) of rejection.

#### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 20, 38-42, 44, 47, 49, 52-62, 64-73, 75, 76, 78-91 and 93 are rejected under 35 U.S.C. 102(b) as being anticipated by Peiffer et al, US Patent No. 6,358,604.

Peiffer et al discloses a biaxially oriented polyester film with a base layer at least 80% by weight of which is composed of a thermoplastic polyester; and with at least one matte outer layer which comprises a mixture or a blend of two components I and II. Component II of the mixture or of the blend is a polyethylene isophthalate copolymer which is composed of the condensation product of the following monomers and/or of their derivatives capable of forming polyesters: isophthalic acid, aliphatic dicarboxylic acid, sulfomonomers which comprise a metal sulfonate

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group on the aromatic moiety of an aromatic dicarboxylic acid, and aliphatic or cycloaliphatic glycol.

Component II of the copolymer or of the mixture or of the blend is a polyethylene isophthalate copolymer, which is composed of the condensation product of the following monomers and/or of their derivatives capable of forming polyesters:

A) from 65 to 95 mol % of isophthalic acid;

B) from 0 to 30 mol % of at least one aliphatic dicarboxylic acid with the formula

$\text{HOOC}(\text{CH}_2)_n\text{COOH}$ , where

n is from 1 to 11;

C) from 5 to 15 mol % of at least one sulfomonomer comprising an alkali metal sulfonate group on the aromatic moiety of a dicarboxylic acid;

D) a copolymerizable aliphatic or cycloaliphatic glycol having from 2 to 11 carbon atoms, in the stoichiometric amount necessary to form 100 mol % of condensate.

An example of a suitable aliphatic diols is an aliphatic glycol of the general formula  $\text{HO}-(\text{CH}_2)_n-\text{OH}$ , where n is an integer from 3 to 6 (in particular 1,3-propanediol, 1,4-butanediol, 1,5-pentanediol and 1,6-hexanediol).

Preferred aromatic dicarboxylic acids are benzenedicarboxylic acids, naphthalenedicarboxylic acids (such as naphthalene-1, 4- or -1,6-dicarboxylic acid), biphenyl-x,x'-dicarboxylic acids (in particular biphenyl-4,4'-dicarboxylic acid), diphenylacetylene-x,x'-dicarboxylic acids (in particular diphenylacetylene-4,4'-dicarboxylic acid) and stilbene-x,x'-

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dicarboxylic acids. Among the cycloaliphatic dicarboxylic acids, mention may be made of cyclohexane dicarboxylic acids (in particular cyclohexane-1, 4-dicarboxylic acid).

Particularly suitable aliphatic dicarboxylic acids are the 3-19 C alkanedicarboxylic acids, where the alkane moiety may be straight-chain or branched. Specific examples include malonic, adipic and glutaric acids.

The components used to formulate the polyester copolymer II of Peiffer et al are essentially the same as those components used in applicant's invention and the components are used in amounts overlapping those of applicant's claims. A copolyester is defined as a polyester containing two or more types of basic repeating units. In patentee's example I a copolyester was prepared using about 90 mol % of isophthalic acid and 10 mol % of the sodium salt of 5-sulfoisophthalic acid as acid component and 100 mol % of ethylene glycol component. Patentee indicates that fillers may be employed in the outer layer. The copolymer II polyesters of Peiffer et al are considered to be identical to those of applicant's claims and therefore render applicant's claims unpatentable.

The patented copolyesters of component II are used in conjunction with polyesters of component I. These polyesters of component I may or may not be inherently biodegradable depending upon their structures. The patented polyesters of component I are considered to encompass biodegradable and nonbiodegradable polyesters and so therefore read upon applicant's claims.

See the abstract, column 2, lines 6-37, col. 4, line 1 through col. 5, line 54.col. 7, line 48 through col. 8, line 52.

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***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 5, 6-23, 26-28, 33-42, 44, 47, 49, 52-62, 64-73, 75, 76, 78-91 and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peiffer et al as applied to claims 1-3, 5-91 and 93 above and in view of the following remarks.

8. The component II copolymers of Peiffer et al, being derived from the same components as applicant's copolyesters, and being used at overlapping amounts, would be expected to possess the same properties as applicant's copolyesters, in for example, inherent viscosity.

***Allowable Subject Matter***

9. Claims 24, 25, 29-32, 43, 45, 46, 48, 50, 51, 63, 74 and 77 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Natural polymers, foamed articles, films having a thickness of 0.25-0.15 mm, specific denier,

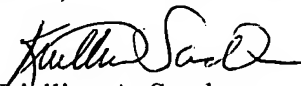
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kriellion A. Sanders whose telephone number is 571-272-1122. The examiner can normally be reached on Monday through Thursday 8:30am-7:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Kriellion A. Sanders  
Primary Examiner  
Art Unit 1714

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